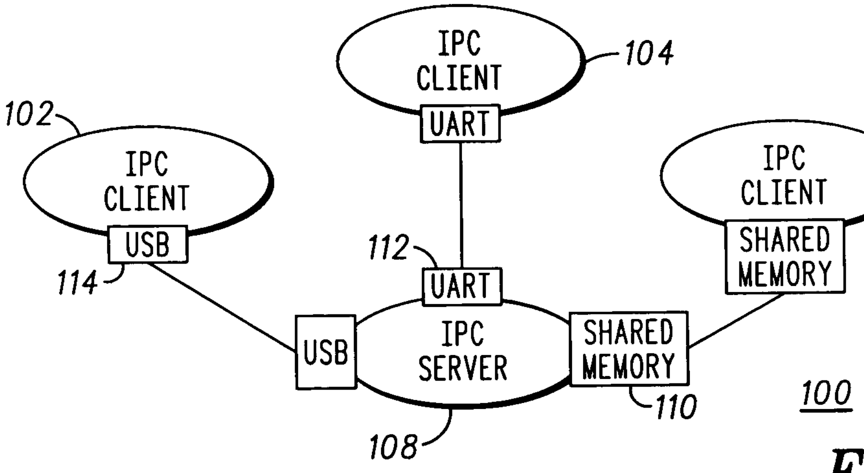


FIG. 1

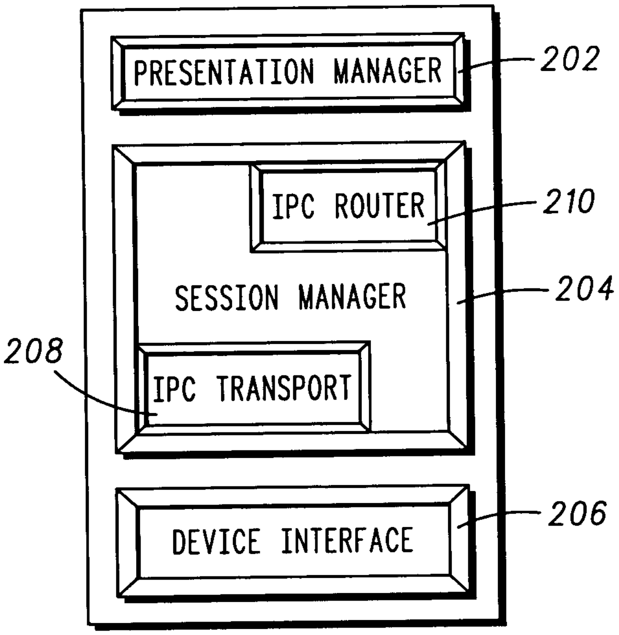


FIG. 2

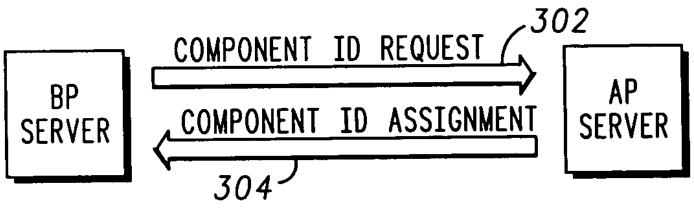


FIG. 3

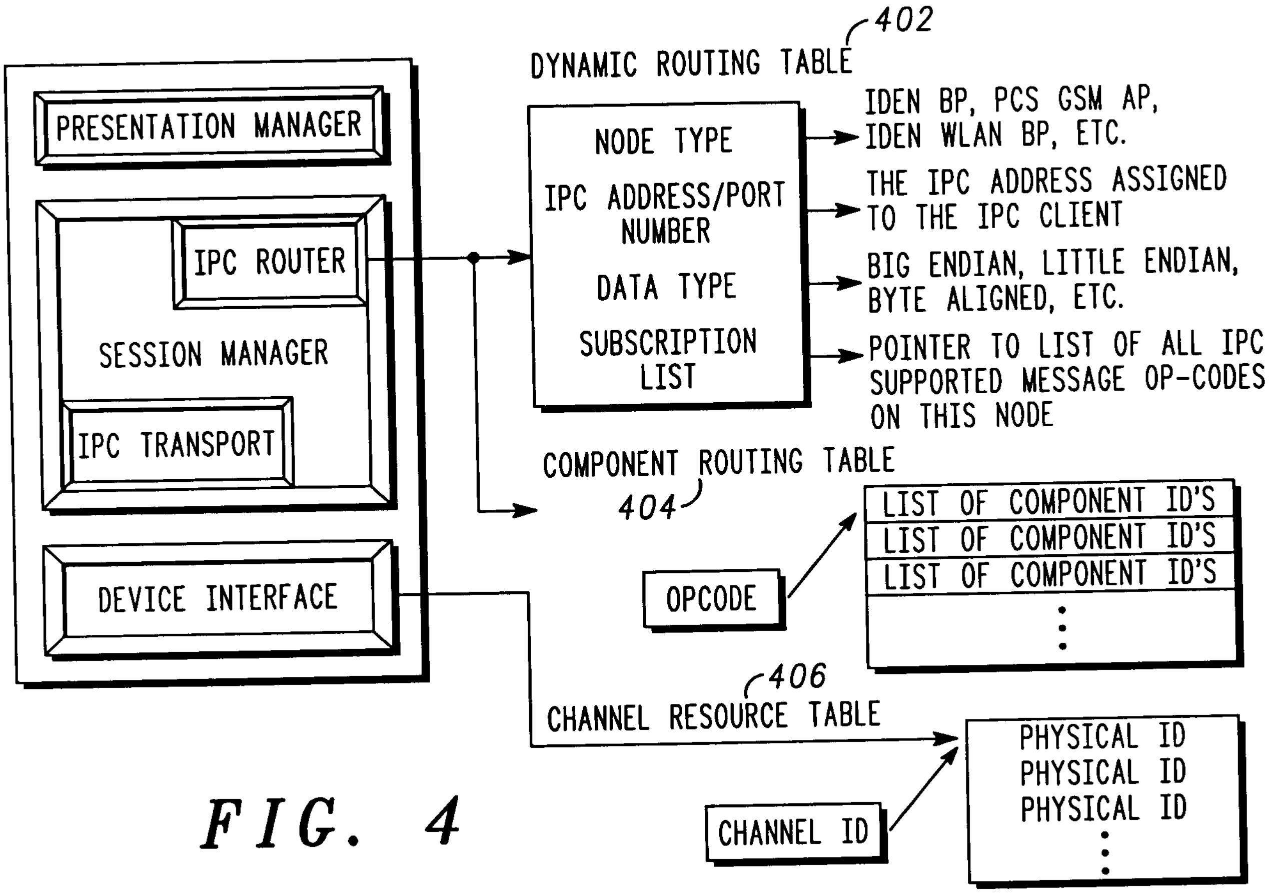

402
DYNAMIC ROUTING TABLE
PRESENTATION MANAGER
IPC ROUTER
SESSION MANAGER
IPC TRANSPORT
DEVICE INTERFACE
NODE TYPE
IPC ADDRESS/PORT NUMBER
DATA TYPE
SUBSCRIPTION LIST
IDEN BP, PCS GSM AP, IDEN WLAN BP, ETC.
THE IPC ADDRESS ASSIGNED TO THE IPC CLIENT
BIG ENDIAN, LITTLE ENDIAN, BYTE ALIGNED, ETC.
POINTER TO LIST OF ALL IPC SUPPORTED MESSAGE OP-CODES ON THIS NODE
COMPONENT ROUTING TABLE
404
OPCODE
LIST OF COMPONENT ID'S
LIST OF COMPONENT ID'S
LIST OF COMPONENT ID'S
406
CHANNEL RESOURCE TABLE
PHYSICAL ID
PHYSICAL ID
PHYSICAL ID
CHANNEL ID

FIG. 4

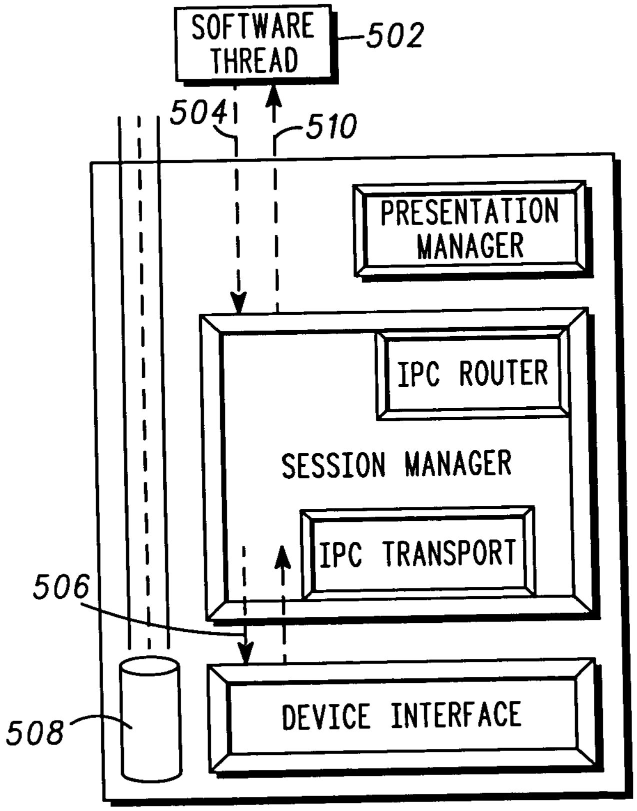

SOFTWARE THREAD
502
504
510
PRESENTATION MANAGER
IPC ROUTER
SESSION MANAGER
IPC TRANSPORT
506
DEVICE INTERFACE
508

FIG. 5

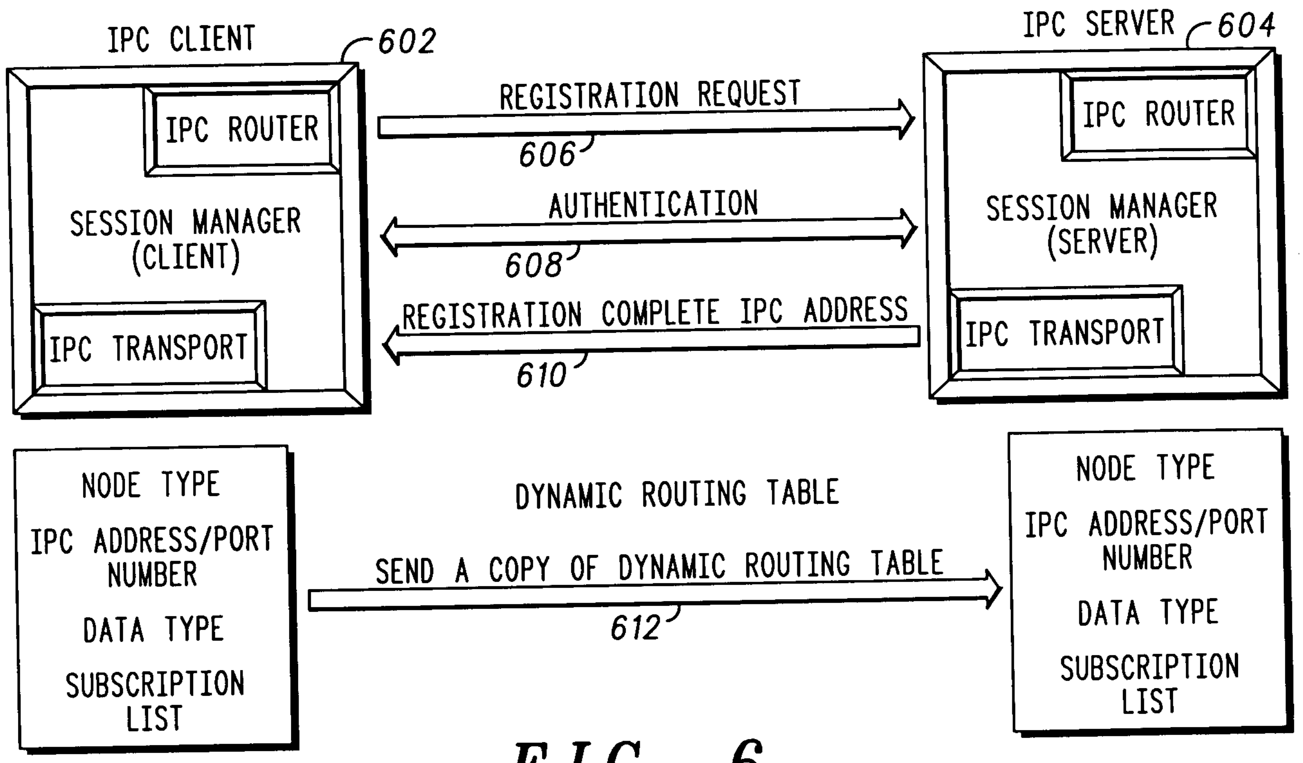

IPC CLIENT
602
IPC ROUTER
SESSION MANAGER (CLIENT)
IPC TRANSPORT
IPC SERVER
604
IPC ROUTER
SESSION MANAGER (SERVER)
IPC TRANSPORT
REGISTRATION REQUEST
606
AUTHENTICATION
608
REGISTRATION COMPLETE IPC ADDRESS
610
NODE TYPE
IPC ADDRESS/PORT NUMBER
DATA TYPE
SUBSCRIPTION LIST
DYNAMIC ROUTING TABLE
SEND A COPY OF DYNAMIC ROUTING TABLE
612
NODE TYPE
IPC ADDRESS/PORT NUMBER
DATA TYPE
SUBSCRIPTION LIST

FIG. 6

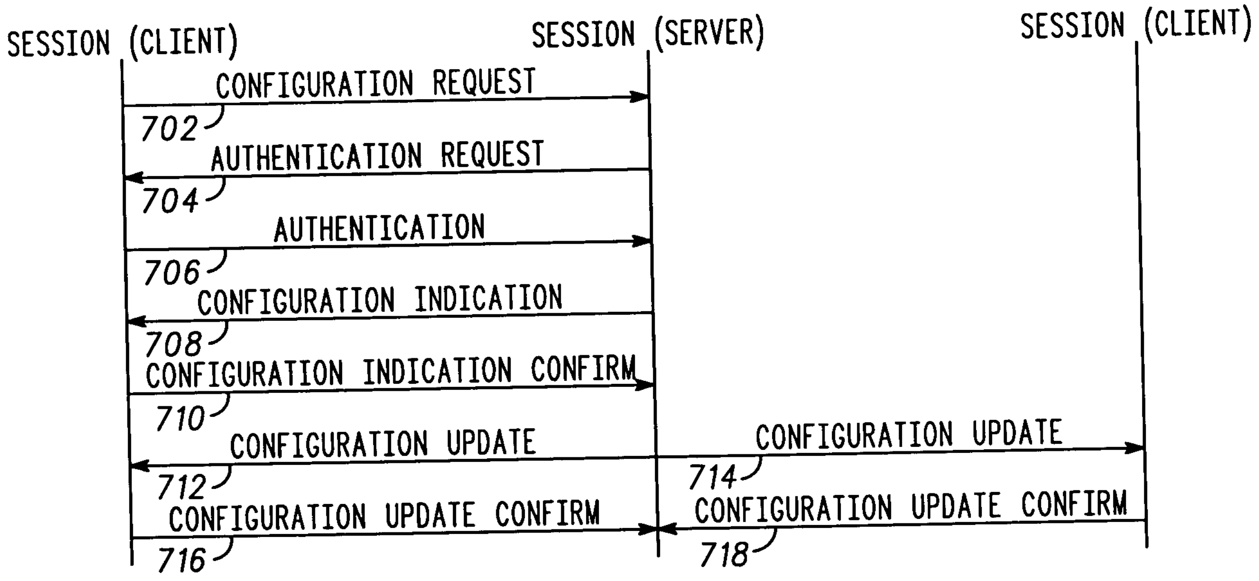

SESSION (CLIENT)
SESSION (SERVER)
SESSION (CLIENT)
CONFIGURATION REQUEST
702
AUTHENTICATION REQUEST
704
AUTHENTICATION
706
CONFIGURATION INDICATION
708
CONFIGURATION INDICATION CONFIRM
710
CONFIGURATION UPDATE
712
CONFIGURATION UPDATE
714
CONFIGURATION UPDATE CONFIRM
716
CONFIGURATION UPDATE CONFIRM
718

FIG. 7

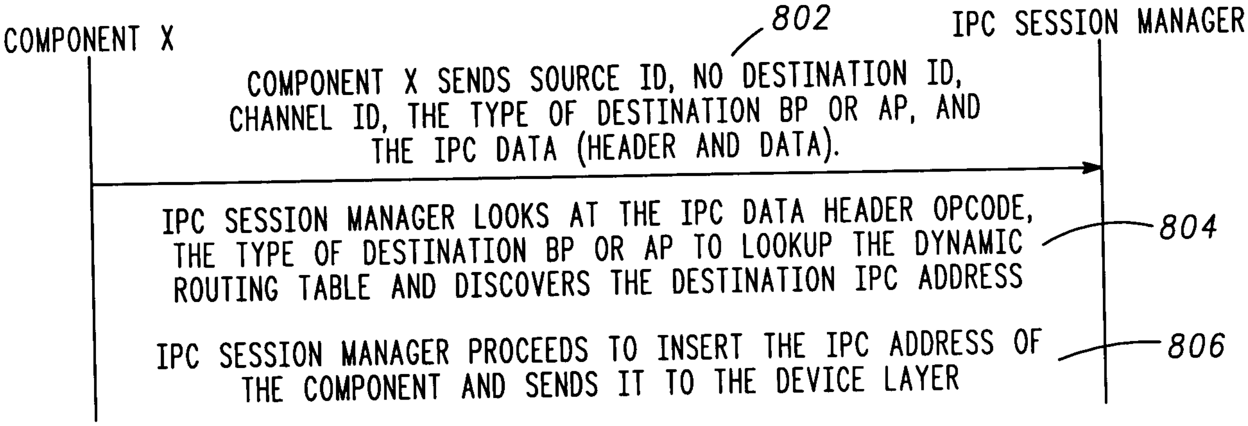

COMPONENT X
802
IPC SESSION MANAGER
COMPONENT X SENDS SOURCE ID, NO DESTINATION ID, CHANNEL ID, THE TYPE OF DESTINATION BP OR AP, AND THE IPC DATA (HEADER AND DATA).
IPC SESSION MANAGER LOOKS AT THE IPC DATA HEADER OPCODE, THE TYPE OF DESTINATION BP OR AP TO LOOKUP THE DYNAMIC ROUTING TABLE AND DISCOVERS THE DESTINATION IPC ADDRESS
804
IPC SESSION MANAGER PROCEEDS TO INSERT THE IPC ADDRESS OF THE COMPONENT AND SENDS IT TO THE DEVICE LAYER
806

FIG. 8

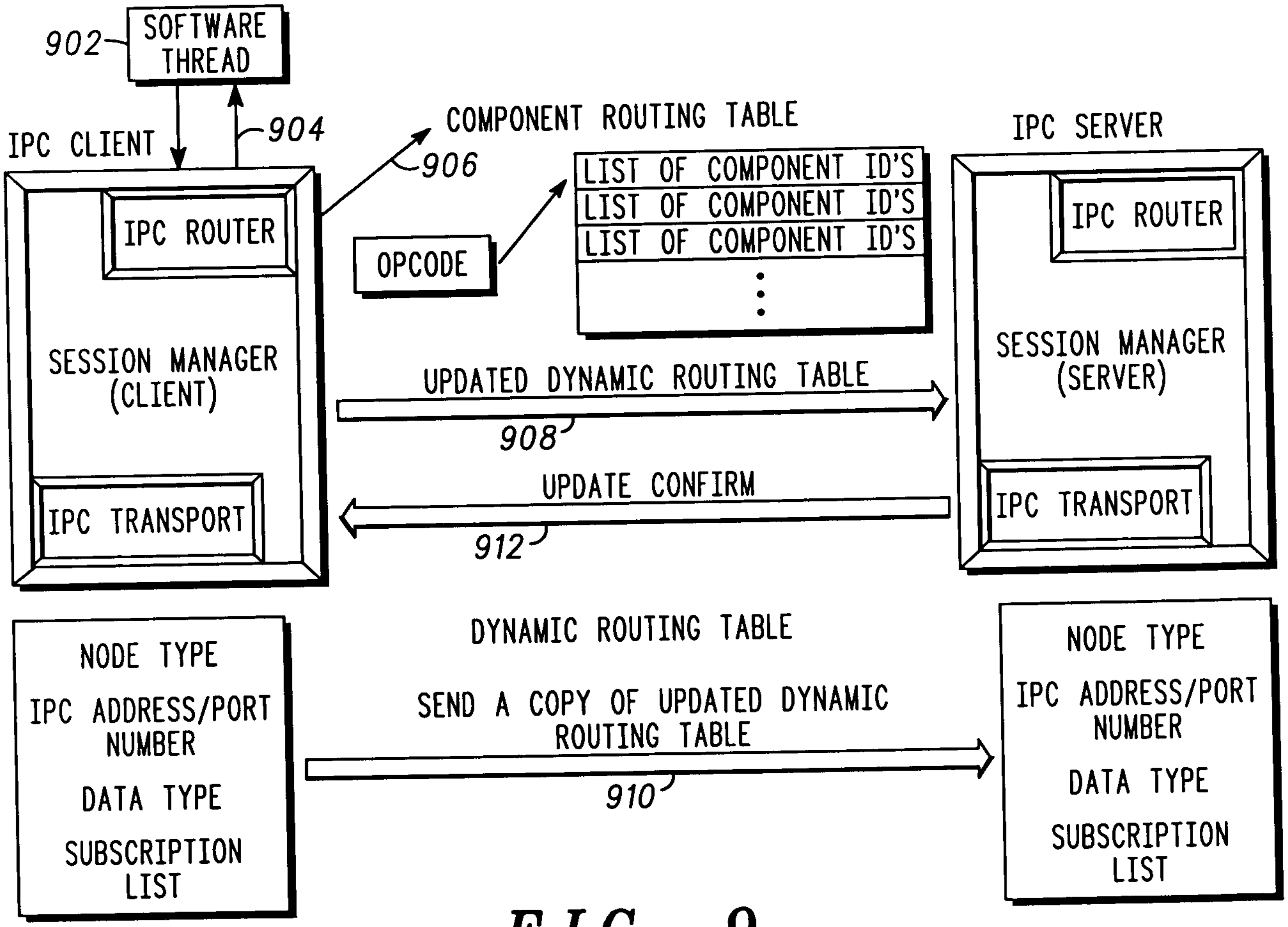

902
SOFTWARE THREAD
IPC CLIENT
904
COMPONENT ROUTING TABLE
906
IPC ROUTER
SESSION MANAGER (CLIENT)
IPC TRANSPORT
OPCODE
LIST OF COMPONENT ID'S
LIST OF COMPONENT ID'S
LIST OF COMPONENT ID'S
IPC SERVER
IPC ROUTER
SESSION MANAGER (SERVER)
IPC TRANSPORT
UPDATED DYNAMIC ROUTING TABLE
908
UPDATE CONFIRM
912
NODE TYPE
IPC ADDRESS/PORT NUMBER
DATA TYPE
SUBSCRIPTION LIST
DYNAMIC ROUTING TABLE
SEND A COPY OF UPDATED DYNAMIC ROUTING TABLE
910
NODE TYPE
IPC ADDRESS/PORT NUMBER
DATA TYPE
SUBSCRIPTION LIST

FIG. 9

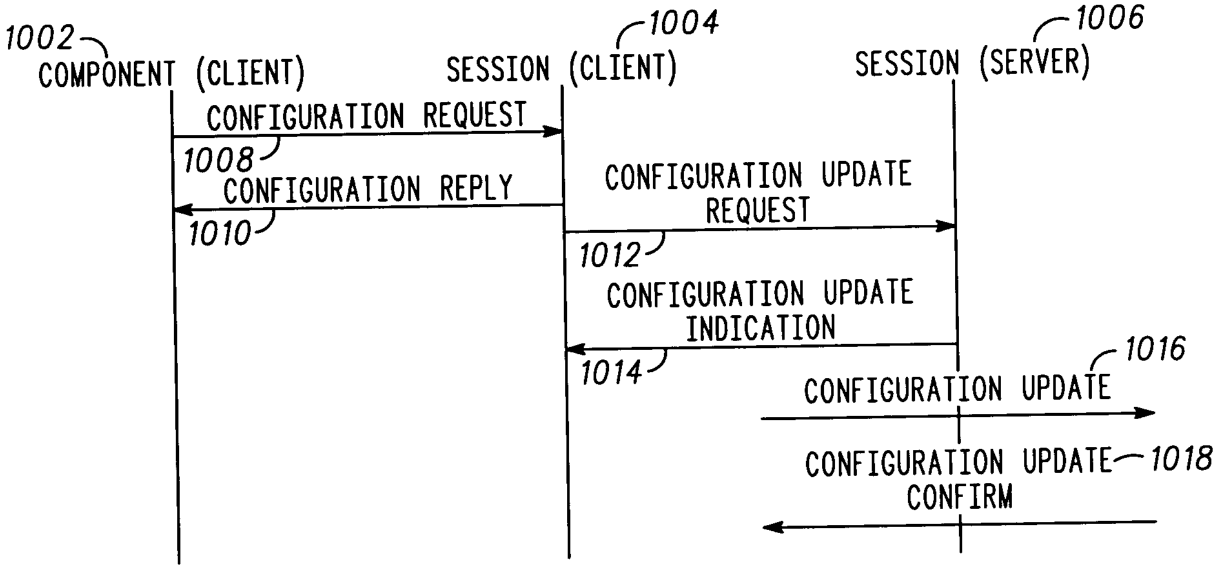

1002
COMPONENT (CLIENT)
1004
SESSION (CLIENT)
1006
SESSION (SERVER)
CONFIGURATION REQUEST
1008
CONFIGURATION REPLY
1010
CONFIGURATION UPDATE REQUEST
1012
CONFIGURATION UPDATE INDICATION
1014
1016
CONFIGURATION UPDATE
CONFIGURATION UPDATE CONFIRM
1018

FIG. 10

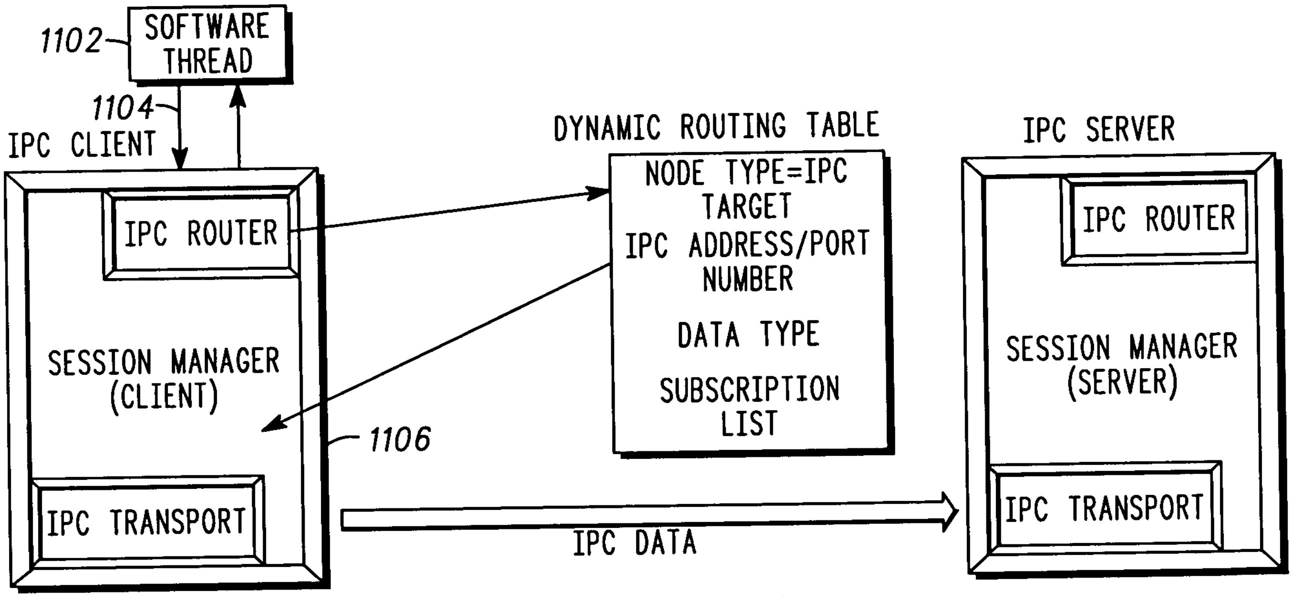

1102
SOFTWARE THREAD
1104
IPC CLIENT
IPC ROUTER
SESSION MANAGER (CLIENT)
IPC TRANSPORT
1106
DYNAMIC ROUTING TABLE
NODE TYPE=IPC TARGET
IPC ADDRESS/PORT NUMBER
DATA TYPE
SUBSCRIPTION LIST
IPC DATA
IPC SERVER
IPC ROUTER
SESSION MANAGER (SERVER)
IPC TRANSPORT

FIG. 11

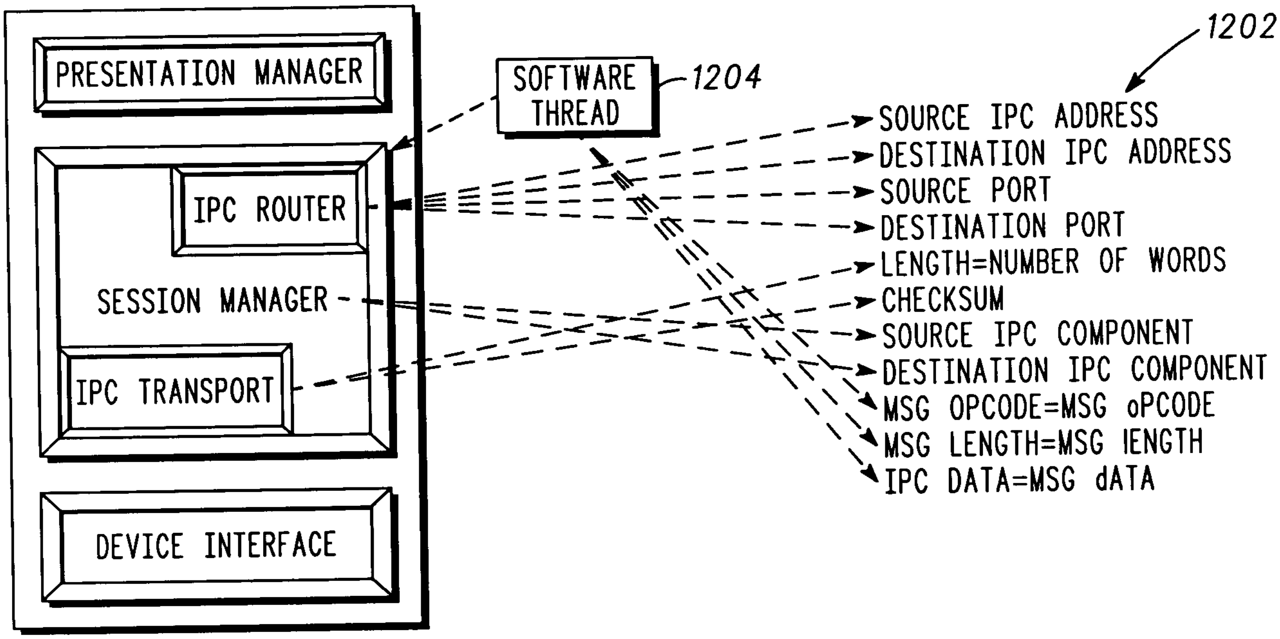

PRESENTATION MANAGER
SOFTWARE THREAD
1204
1202
IPC ROUTER
SESSION MANAGER
IPC TRANSPORT
DEVICE INTERFACE
SOURCE IPC ADDRESS
DESTINATION IPC ADDRESS
SOURCE PORT
DESTINATION PORT
LENGTH=NUMBER OF WORDS
CHECKSUM
SOURCE IPC COMPONENT
DESTINATION IPC COMPONENT
MSG OPCODE=MSG oPCODE
MSG LENGTH=MSG lENGTH
IPC DATA=MSG dATA

FIG. 12

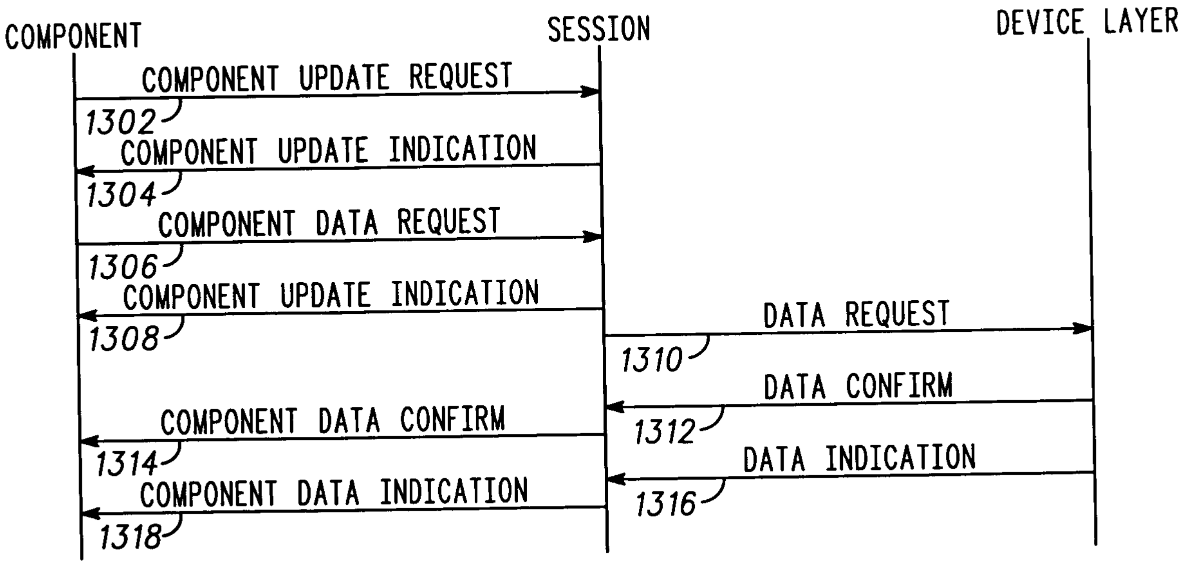

COMPONENT
SESSION
DEVICE LAYER
COMPONENT UPDATE REQUEST
1302
COMPONENT UPDATE INDICATION
1304
COMPONENT DATA REQUEST
1306
COMPONENT UPDATE INDICATION
1308
DATA REQUEST
1310
DATA CONFIRM
1312
COMPONENT DATA CONFIRM
1314
DATA INDICATION
1316
COMPONENT DATA INDICATION
1318

FIG. 13

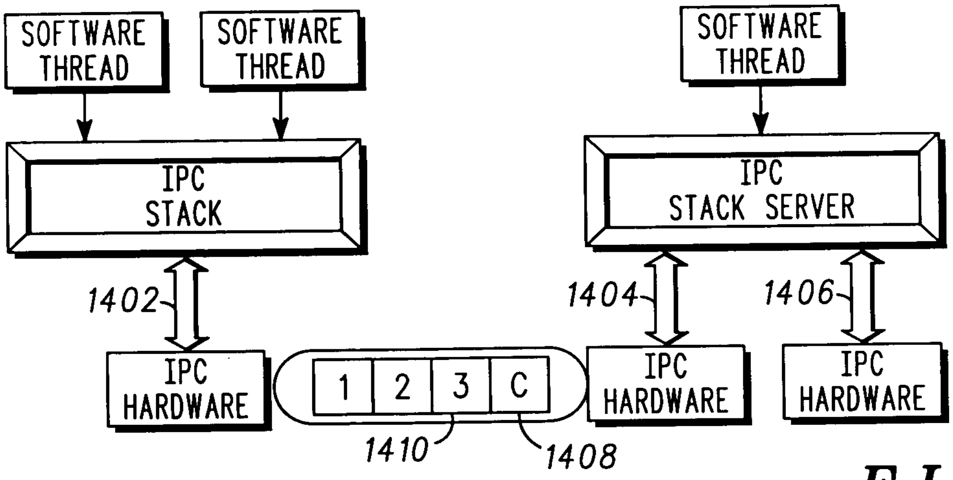


FIG. 14

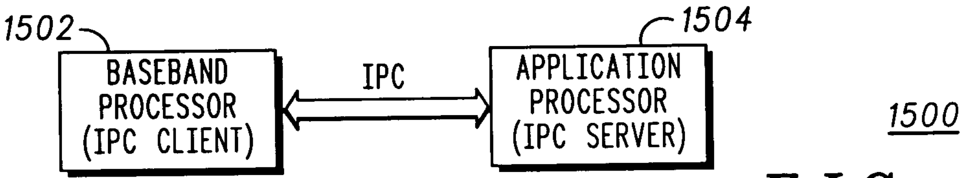

1502
BASEBAND PROCESSOR (IPC CLIENT)
IPC
1504
APPLICATION PROCESSOR (IPC SERVER)
1500

FIG. 15

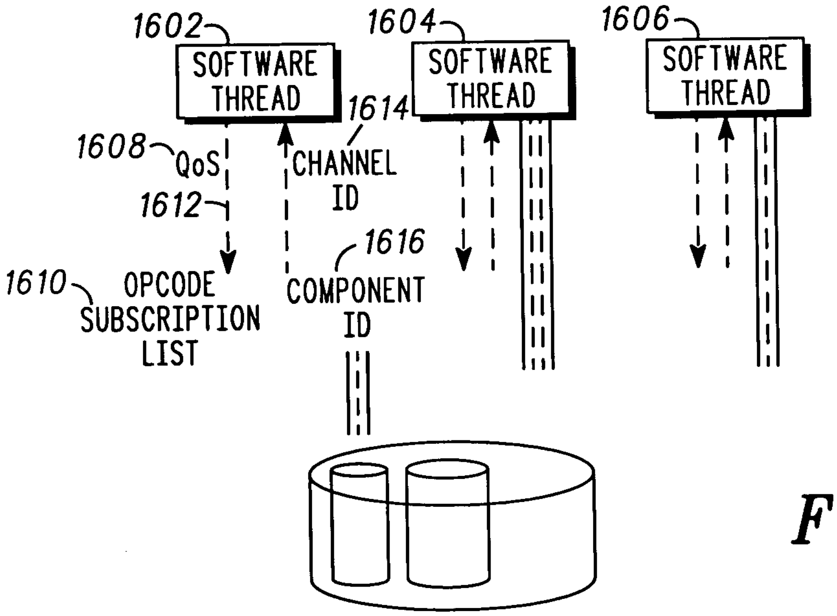


FIG. 16

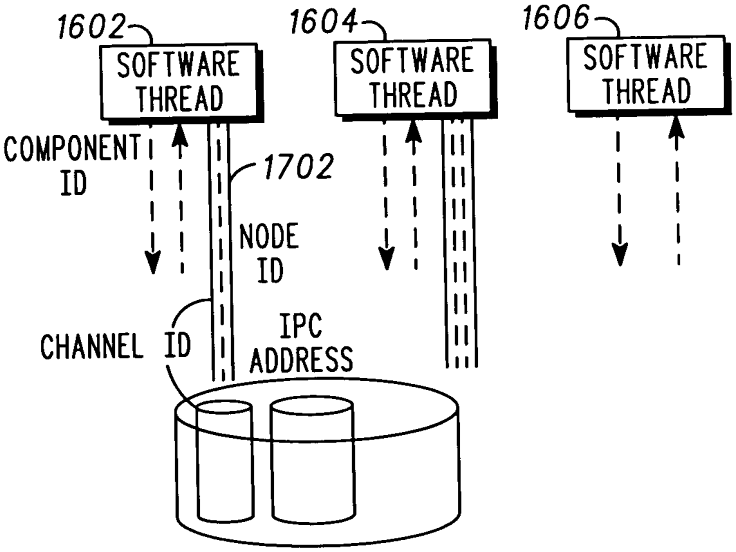

1602
SOFTWARE THREAD
1604
SOFTWARE THREAD
1606
SOFTWARE THREAD
COMPONENT ID
1702
NODE ID
CHANNEL ID
IPC ADDRESS

FIG. 17

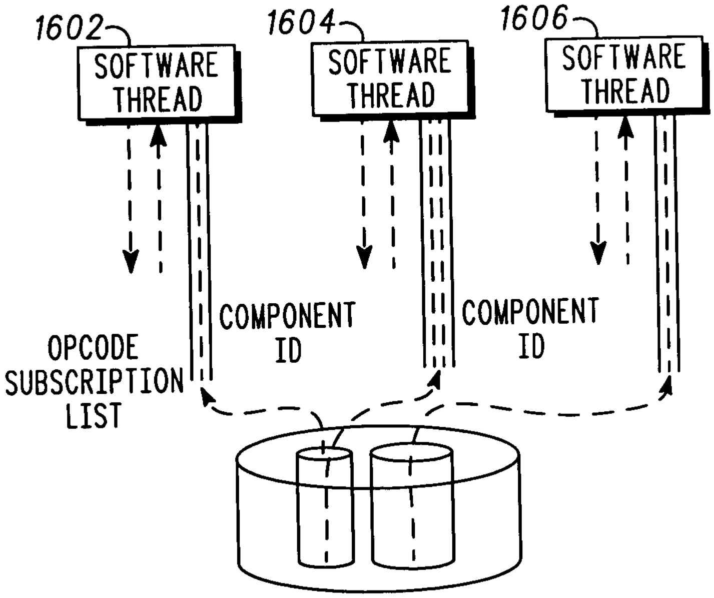

1602
SOFTWARE THREAD
1604
SOFTWARE THREAD
1606
SOFTWARE THREAD
COMPONENT ID
COMPONENT ID
OPCODE SUBSCRIPTION LIST

FIG. 18

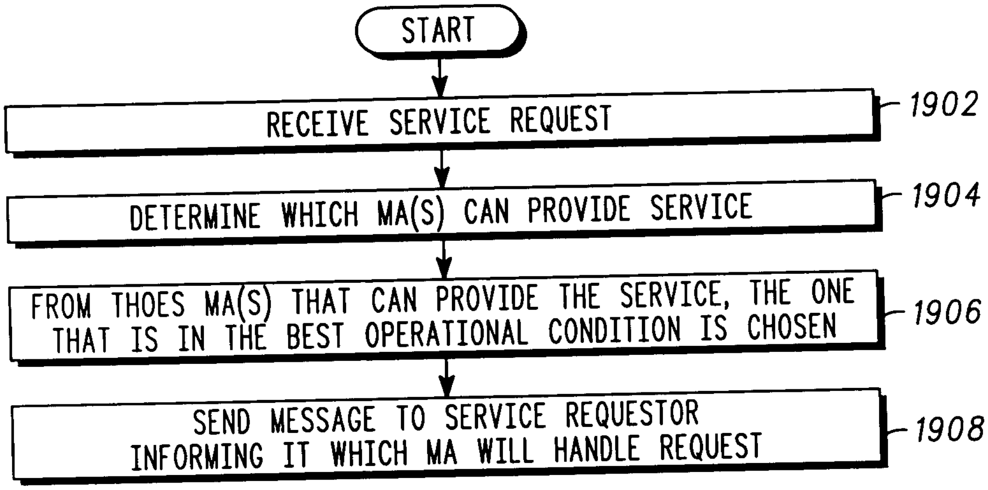
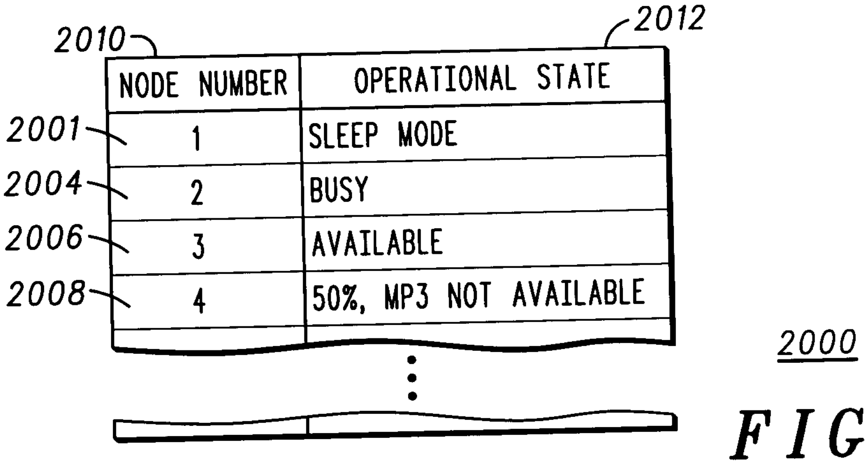

START
RECEIVE SERVICE REQUEST
1902
DETERMINE WHICH MA(S) CAN PROVIDE SERVICE
1904
FROM THOES MA(S) THAT CAN PROVIDE THE SERVICE, THE ONE THAT IS IN THE BEST OPERATIONAL CONDITION IS CHOSEN
1906
SEND MESSAGE TO SERVICE REQUESTOR INFORMING IT WHICH MA WILL HANDLE REQUEST
1908

FIG. 19


2010
2012
2001
2004
2006
2008
2000

NODE NUMBER	OPERATIONAL STATE
1	SLEEP MODE
2	BUSY
3	AVAILABLE
4	50%, MP3 NOT AVAILABLE

FIG. 20

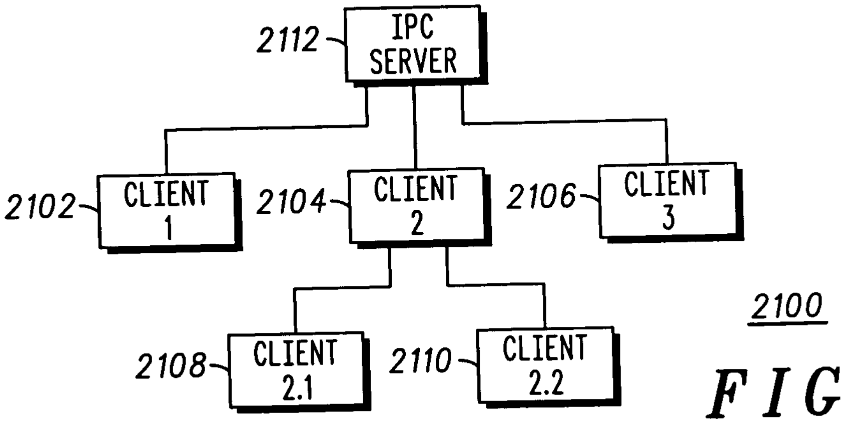


FIG. 21